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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,434	10/15/2003	Tetsuro Motoyama	242160US2CONT	7907

22850 7590 03/23/2006

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EXAMINER

PRICE, NATHAN E

ART UNIT PAPER NUMBER

2194

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/684,434	Applicant(s) MOTOYAMA ET AL.	
	Examiner Nathan Price	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 November 2005 and 05 January 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5-9,13-17,21-25 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5-9,13-17,21-25 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**WILLIAM THOMSON**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/1/05 and 12/19/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1, 5-9, 13-17, 21-25 and 29-32 are presented for examination. Claims 2-4, 10-12, 18-20 and 26-28 have been canceled.

#### ***Terminal Disclaimer***

2. Examiner notes that Applicant has stated in REMARKS to the previous Office Action that a Terminal Disclaimer over U.S. Patent 6,662,225 was filed with the response. However, Examiner has not received or viewed the Terminal Disclaimer and requests that it be sent again.

#### ***Response to Arguments***

3. Applicant's arguments, see REMARKS, filed 5 January 2006, with respect to whether the independent claims 1, 9 and 17 claimed a practical application producing a useful, concrete and tangible result, the monitoring means of claim 9 being hardware and claim 17 being clearly directed toward a method have been fully considered and are persuasive. The rejection (with respect to these grounds of rejection) of claims 1, 5 – 9, 13 – 17 and 21 – 24 has been withdrawn.
4. Applicant's arguments filed 5 January 2006, with respect to the argument that claim 1 not being comprised entirely of software, have been fully considered but they are not persuasive. See explanation below.

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5. Applicant's arguments with respect to the rejections under 35 USC § 103 of claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1 and 5-8 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The language of independent claim 1 raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a useful, concrete and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101.

Independent claim 1 does not appear to require any computer hardware to implement the claimed invention. This claim appears to define the metes and bounds of an invention comprised of software alone. There is no support (i.e., explicitly claimed computer hardware) in the body of the claims. The system of claim 1 appears to be a system comprised entirely of software. Software alone, without a machine, is incapable of transforming any physical subject matter by chemical, electrical, or mechanical acts. If the "acts" of a claimed process manipulate only numbers, abstract concepts or ideas, or signals representing any

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of the foregoing, the acts are not being applied to appropriate subject matter. In re Schrader, 22 F.3d 290 at 294-95, 30 USPQ2d 1455 at 1458-59 (Fed. Cir. 1994). Transformation of data by a machine constitutes statutory subject matter if the claimed invention as a whole accomplishes a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d 1368, 1373, 47 USPQ2d 1596 at 1600-02 (Fed. Cir. 1998). MPEP 2106. State Street required transformation of data by a machine before it applied the "useful, concrete, and tangible test." However, State Street does not hold that a "useful, concrete and tangible result" alone, without a machine, is sufficient for statutory subject matter. State Street, 149 F.3d at 1373, 47 USPQ2d at 1601.

Claims 1 and 5-8 are rejected under 35 U.S.C. 101 because the claimed invention appears to be comprised of software alone without claiming associated computer hardware required for execution. Applicant has argued that "an operation panel of an image forming device" is a "concrete element." However, an operation panel could be a graphical user interface (GUI), and is therefore interpreted to include an operation panel created entirely in software. Also, a monitoring unit is not restricted to a hardware component, and can therefore be implemented entirely in software.

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to

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be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5, 6, 8/1, 8/5, 8/6, 9, 13, 14, 16/9, 16/13, 16/14, 17, 21, 22, 24/17, 24/21, 24/22, 25, 29, 30, 32/25, 32/29, 32/30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wygodny et al (U S Pat. 6,202,199) in view of Hintermeister et al (U S Pat. 6,345,306), Motoyama (U S Pat. 5,568,618) and official notice that a graphical user interface (GUI) used to control devices is well known in the art.

As to claim 9, Wygodny teaches a system comprising:

interface means (OCX/Active-X controls to be traced) of a target application means (client), the interface means for providing a plurality of operations to be selected by a user [inherent to the operations of OCX/Active-X controls] (col. 28, lines 28-38);

monitoring means for monitoring (trace library) data of selecting of the plurality of operations of the interface means by the user, and for generating a log (trace log file) of the monitored data (col. 6, lines 3-11),

communicating means for communicating the log of the monitored data (remote mode, send trace log file by e-mail, col. 6, lines 49-54).

While Wygodny teaches communicating data to a remote site (remote mode, cols. 5-6), which typically requires marshalling/packaging the data, Wygodny does not teach packaging the log of the monitored data into different forms of the monitored data using a packaging object derived from an abstract

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class, and receiving an object derived from the abstract class including the log of the monitored data. Wygodny also does not teach that the interface is an operation panel of an image forming device.

Hintermeister teaches data communication, including packaging the data (package elements) into different forms using a packaging object (packager 126) derived from an abstract class (Package base class of the framework), and receiving an object derived from the abstract class (derived classes such as Physical Contents) including the data (package elements, col. 6, lines 5-31).

Therefore, it would have been obvious to include packaging the log of the monitored data into different forms of the monitored data using a packaging object derived from an abstract class, and receiving an object derived from the abstract class including the log of the monitored data. One of ordinary skill in the art would have been motivated to combine the teachings of Wygodny and Hintermeister because this would have allowed easy and efficient definition of different output formats (col. 2, lines 5-37).

As to the interface being an operation panel, official notice is taken that it is well known in the art that a graphical user interface (GUI) can be implemented to allow a user to control a physical device, including devices such as printers and scanners. Therefore, the operation panel can be implemented in software, and monitoring of software is taught by the references. As stated in the previous Office Action, Wygodny teaches the target application is a software application (client 102) and the interface is a display screen of the software application

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(OCX/Active-X controls to be traced) [It is noted that OCX/Active-X controls are used to implement typical GUI elements of window applications].

In addition to the use of graphical user interfaces used to control devices being well known in the art, Motoyama teaches a target application is an image forming device and the interface is an operation panel of the image forming device, and a target application is an appliance and the interface is an operation panel of the appliance (remote diagnostics on business office devices, col. 1, lines 16-33, col. 6, lines 8-38).

Therefore, it would have been obvious to include image forming device, appliance and operation panel into Wygodny as modified. One of ordinary skill in the art would have been motivated to combine the teachings of Wygodny as modified and Motoyama because this would have provided controls of various models and products (col. 1, lines 53-62).

As to claim 1, note discussion of claim 9.

As to claims 17 and 25, they are a method claim and a program product claim of claim 9 and thus note discussion of claim 9.

As to claims 5, 13, 21 and 29, Wygodny teaches sending the log of the monitored data when the user exits the target application (log and send trace log file when client terminates, col. 6, lines 1-20).

As to claims 6, 14, 22 and 30, Wygodny teaches a setting unit (trace control information CTI file) configured to set a number of sessions of the target application to be executed by the user prior to the communicating unit communicating the log of the monitored data (col. 10, line 51 – col. 11, line 30).



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Trace duration (number of sessions) is a typical trace control parameter, and therefore, it would have been obvious to include such information into the CTI file Wygodny.

As to claims 8/1, 8/5, 8/6, 16/9, 16/13, 16/14, 24/17, 24/21, 24/22, 32/25, 32/29 and 32/30, Wygodny teaches the communicating unit communicates the log of the monitored data by Internet mail (send trace log file by e-mail, col. 6, lines 49-54).

As to claims 13-16, note discussions of claims 5-8, respectively.

10. Claims 7, 8/7, 15, 16/15, 23, 24/23, 31, 32/31 would be allowable if rewritten to overcome the rejection(s) under the obviousness - type double patenting / under 35 U.S.C. 101 (see discussion of terminal disclaimer above), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims, and subjected to a final search update.

11. Although Applicant's arguments with respect to the rejections under 35 USC § 103 of claims 1-32 are moot in view of the new ground(s) of rejection, the issues raised by the Applicant remain relevant after the amendments to the claims and are worth addressing.

As stated in the above rejections, the operation panel can be implemented in software as a GUI, which provides a user controls to use when operating a device. When controls on an operation panel are used, it instructs the software to perform certain operations (for example: start, stop, transfer data). Therefore, user inputs to the software result in providing Wygodny with data to trace, which includes "execution paths, subroutine calls, and variable usage" (see Applicant's REMARKS, page 10 ¶ 2), that can be controlled using an operation panel implemented in software as a GUI. This includes monitoring selections of operations on an operation panel implemented as a GUI.

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With respect to Applicant's argument that Motoyama is unrelated to the teachings of Wygodny, Motoyama discloses that business devices, such as high-speed copiers, include microprocessors and software (col. 1 lines 28 – 48). In addition, Motoyama discloses that microprocessors are used for "various tasks, including an operation panel consisting of many buttons and displays, controlled by a microprocessor" (col. 1 lines 31 – 33). Therefore, devices disclosed in Motoyama include software and an operation panel to control their operation, which, as described above, can include an operation panel implemented in software that can be monitored. When a user provides input to the operation panel, the input can affect the execution paths, subroutine calls, and variable usage, all of which can be monitored, thereby monitoring the user's input and usage of the device through the operation panel. Therefore, one of ordinary skill in the art at the time of Applicant's invention would have been motivated to combine a disclosure for monitoring software execution with a disclosure that describes a device that operates using software.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is

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filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 7:30am - 4:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

  
**WILLIAM THOMSON**  
SUPERVISORY PATENT EXAMINER  
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nathan Price